What is claimed is:

1. A fluid pressure reduction device comprising:

a first cylinder having a first inner surface, a first outer surface, and a first plurality of apertures extending from the first inner surface to the first outer surface; and

a second cylinder disposed within the first cylinder and having a second inner surface, a second outer surface, and a second plurality of apertures extending from the second inner surface to the second outer surface, wherein a substantial portion of the first inner surface is in contact with a substantial portion of the second outer surface, and wherein at least portions of the first plurality of apertures overlap at least portions of the second plurality of apertures.

2. A fluid pressure reduction device as defined in claim 1, wherein at least some of the first plurality of apertures and at least some of the second plurality of apertures are configured to form flow paths.

3. A fluid pressure reduction device as defined in claim 2, wherein the flow paths are torturous flow paths.

4. A fluid pressure reduction device as defined in claim 1, wherein the first and second cylinders have different material compositions.

5. A fluid pressure reduction device as defined in claim 1, wherein at least one of the first cylinder and the second cylinder is associated with a pressure-reduction stage.

6. A fluid pressure reduction device as defined in claim 1, wherein the first cylinder and the second cylinder are frictionally engaged with each other.

7. A fluid pressure reduction device as defined in claim 1, wherein the first cylinder is in a fixed position relative to the second cylinder.

8. A fluid pressure reduction device as defined in claim 1, wherein the first and second cylinders are configured to provide an axial flow and a radial flow.

9. A fluid pressure reduction device as defined in claim 1, wherein the first and second cylinders are configured for use in at least one of a gas handling system and a liquid handling system.

10. A fluid pressure reduction device as defined in claim 1, wherein at least some of the first plurality of apertures function as at least one of plenums, inlet stages, and outlet stages.

11. A fluid pressure reduction device as defined in claim 10, wherein the plenums are associated with at least one of an axial flow and a radial flow.

12. A fluid pressure reduction device as defined in claim 1, wherein at least some of the second plurality of apertures function as at least one of plenums, inlet stages, and outlet stages.

13. A fluid pressure reduction device as defined in claim 12, wherein the plenums are associated with at least one of an axial flow and a radial flow.

14. A fluid pressure reduction device as defined in claim 1, wherein at least one of the first plurality of apertures forms a first portion of a plenum and wherein at least one of the second plurality of apertures forms a second portion of the plenum.

15. A fluid pressure reduction device as defined in claim 14, wherein the first portion of the plenum and the second portion of the plenum are formed using an acid etching manufacturing process.

16. A fluid pressure reduction device as defined in claim 1, wherein the first cylinder and the second cylinder are manufactured using at least one of an investment casting process, a laser cutting process, a water jet cutting process, an electrical discharge machining process, a powder metallurgy process, a metal injection molding process, an acid etching process, and a drawn tubing process.

17. A fluid pressure reduction device comprising:

a plurality of cylinders, each of the cylinders having an inner surface and an outer surface and a plurality of apertures extending from the inner surface to the outer surface, wherein the cylinders are arranged in a nested configuration so that a substantial portion of the inner surface of one of the plurality of cylinders is engaged with a substantial portion of the outer surface of another one of the plurality of cylinders, wherein at least portions of the apertures of the one of the plurality of cylinders overlap at least portions of the apertures of the other one of the plurality of cylinders to form at least one flow path.

18. A fluid pressure reduction device as defined in claim 17, wherein at least some of the plurality of apertures are at least one of a slot shape and a non-circular shape.

19. A fluid pressure reduction device as defined in claim 17, wherein at least some of the plurality of apertures function as at least one of plenums, inlet stages, and outlet stages.

20. A fluid pressure reduction device as defined in claim 19, wherein the plenums are associated with at least one of an axial flow and a radial flow.

21. A fluid pressure reduction device as defined in claim 17, wherein the plurality of cylinders is configured to enable at least one of an axial flow and a radial flow of a process fluid.

22. A fluid pressure reduction device as defined in claim 17, wherein the at least one flow path is a torturous flow path.

23. A fluid pressure reduction device as defined in claim 17, wherein at least one of the plurality of cylinders is associated with a pressure-reduction stage.

24. A fluid pressure reduction device as defined in claim 17, wherein at least two of the plurality of cylinders are press fit together.

25. A fluid pressure reduction device as defined in claim 17, wherein at least two of the plurality of cylinders are assembled in a fixed position relative to one another.

26. A fluid pressure reduction device as defined in claim 17, wherein at least a first one of the plurality of cylinders includes a different material composition from at least a second one of the plurality of cylinders.

27. A fluid pressure reduction device as defined in claim 17, wherein at least one of the apertures of the one of the plurality of cylinders forms a first portion of a plenum and wherein at least one of the apertures of the other one of the plurality of cylinders forms a second portion of the plenum.

28. A fluid pressure reduction device as defined in claim 27, wherein the first portion of the plenum and the second portion of the plenum are formed using an acid etching manufacturing process.

29. A fluid pressure reduction device as defined in claim 17, wherein the plurality of cylinders are manufactured using at least one of an investment casting process, a laser cutting process, a water jet cutting process, an electrical discharge machining process, a powder metallurgy process, a metal injection molding process, an acid etching process, and a drawn tubing process.

30. A fluid pressure reduction device comprising:

a plurality of cylinders configured to form a relatively larger cylinder, each of the cylinders having an inner surface and an outer surface, and a plurality of apertures extending from the inner surface to the outer surface, wherein at least some of the outer surfaces are configured to be placed within at least some of the inner surfaces so that a substantial portion of at least some of the outer surfaces are in contact with a substantial portion of at least some of the inner surfaces, and wherein at least some of the plurality of apertures are configured to overlap to form a flow path from the inner surface of one of the plurality of cylinders to the outer surface of another one of the plurality of cylinders.

31. A fluid pressure reduction device as defined in claim 30, wherein at least some of the plurality of apertures have at least one of a slot shape and a non-circular shape.

32. A fluid pressure reduction device as defined in claim 30, wherein at least some of the plurality of apertures function as at least one of plenums, inlet stages, and outlet stages.

33. A fluid pressure reduction device as defined in claim 32, wherein the plenums are associated with at least one of an axial flow and a radial flow.

34. A fluid pressure reduction device as defined in claim 30, wherein the flow path is associated with at least one of an axial flow and a radial flow.

35. A fluid pressure reduction device as defined in claim 30, wherein the flow path is a torturous flow path.

36. A fluid pressure reduction device as defined in claim 30, wherein at least one of the plurality of cylinders is associated with a pressure-reduction stage.

37. A fluid pressure reduction device as defined in claim 30, wherein at least some of the plurality of cylinders are press fit together.

38. A fluid pressure reduction device as defined in claim 30, wherein at least some of the plurality of cylinders are assembled in a fixed position relative to one another.

39. A fluid pressure reduction device as defined in claim 30, wherein at least a first one of the plurality of cylinders includes a different material composition from at least a second one of the plurality of cylinders.

40. A fluid pressure reduction device as defined in claim 30, wherein at least a first one of the plurality of apertures forms a first portion of a plenum and wherein at least a second one of the plurality of apertures forms a second portion of the plenum.

41. A fluid pressure reduction device as defined in claim 40, wherein the first portion of the plenum and the second portion of the plenum are formed using an acid etching manufacturing process.

42. A fluid pressure reduction device as defined in claim 30, wherein the plurality of cylinders are manufactured using at least one of an investment casting process, a laser cutting process, a water jet cutting process, an electrical discharge machining process, a powder metallurgy process, a metal injection molding process, an acid etching process, and a drawn tubing process.